WHAT IS CLAIMED IS:

1. A method for assembling a combustor for a gas turbine engine, said method comprising:

providing a dome assembly that includes at least one cooling slot lip and at least one filler projection, wherein a gap defined between the cooling slot lip and the at least one filler projection has a height defined between cooling slot lip and the at least one filler projection that is substantially uniform through the gap;

coupling a liner assembly to the dome assembly, such that a combustion chamber is defined by the liner assembly; and

coupling an inner and an outer support to the dome assembly, such that the dome assembly extends between the inner and outer supports.

2. A method in accordance with Claim 1 further comprising coupling an upstream end of a baffle to the dome assembly such that the baffle extends downstream from the dome assembly into the combustion chamber, and wherein a downstream end of the baffle is flared to facilitate channeling fuel injected into the combustion chamber away from the domeplate gap.

3. A method in accordance with Claim 1 wherein coupling a liner assembly to the dome assembly further comprises:

coupling an inner liner to the dome assembly such the inner liner is spaced radially outward from the inner support; and

coupling an outer liner to the dome assembly such that the outer liner is spaced radially inward from the outer support, wherein at least one of the inner and outer liners includes a leading edge is formed with a pre-determined radius of curvature.

4. A method in accordance with Claim 1 wherein coupling a liner assembly to the dome assembly further comprises:

coupling an inner liner to the dome assembly such the inner liner is spaced radially inward from the inner support; and

coupling an outer liner to the dome assembly such that the outer liner is spaced radially inward from the outer support, wherein at least one of the inner and outer liners includes a leading edge that is positioned downstream from the gap such that the leading edge forms a forward facing step for flow discharged from the gap.

5. A method in accordance with Claim 1 wherein coupling a liner assembly the dome assembly further comprises coupling a seal member between the liner assembly and at least one of the inner support and the outer support, such that the at least one filler projection facilitates shielding the seal member from flame radiation generated within said combustion chamber.

6. A combustor for a gas turbine engine, said combustor comprising:

a combustion chamber having a centerline axis extending therethrough;

an outer support;

an inner support; and

a dome assembly comprising a domeplate extending between said inner and outer supports, said domeplate comprising at least one cooling slot lip, and at least one filler projection, said at least one cooling slot spaced radially from said at least one filler projection such that a gap is defined between, said gap having a height measured between said at least one cooling slot lip and said at least one filler projection, said gap height substantially constant through said gap.

7. A combustor in accordance with Claim 6 further comprising a baffle comprising an upstream end, a downstream end, and a divergent body extending therebetween, said upstream end coupled to said domeplate, said downstream end flared to facilitate directing fuel injected to said combustion chamber away from said gap.

8. A combustor in accordance with Claim 6 wherein said baffle is spaced radially inward from said film cooling lip such that a slot is defined therebetween, said slot for channeling cooling air therethrough into said combustion chamber.

9. A combustor in accordance with Claim 6 further comprising an inner liner and an outer liner, said outer liner coupled to said domeplate and radially outward from said outer support, said inner liner coupled to said domeplate and radially inward from said inner support, said combustion chamber defined between said inner and outer liners.

10. A combustor in accordance with Claim 9 wherein at least one of said inner liner and said outer liner comprises a leading edge that is coupled downstream from said gap, said leading edge comprising a radius.

11. A combustor in accordance with Claim 9 wherein at least one of said inner liner and said outer liner comprises a leading edge that forms a forward facing step for flow discharged from said gap.

12. A combustor in accordance with Claim 9 wherein said gap discharges cooling air therefrom for film cooling at least one of said inner liner and said outer liner, said gap height selected to facilitate discharging cooling air from said gap at a velocity that is higher than a turbulent flame speed generated within said combustion chamber.

13. A combustor in accordance with Claim 9 wherein said dome assembly further comprises at least one seal extending between at least one of said inner and outer liners and at least one of said inner and outer supports, said at least one filler projection facilitates sheilding said at least one seal from flame radiation generated within said combustion chamber.

14. A gas turbine engine comprising a combustor comprising a liner assembly, a combustion chamber, a dome assembly, an outer support, and an inner support, said combustion chamber defined by said liner assembly, said dome assembly

comprising a domeplate extending between said inner and outer supports, said domeplate comprising at least one cooling slot lip, and at least one filler projection, said liner assembly coupled to said domeplate in contact with said at least one filler projection, said at least one cooling slot spaced radially from said at least one filler projection such that a gap is defined between, said gap having a height measured between said at least one cooling slot lip and said at least one filler projection, said gap height substantially constant through said gap.

15. A gas turbine engine in accordance with Claim 14 wherein said combustor liner assembly comprises an inner liner and an outer liner, each of said inner and outer liners coupled to said domeplate, said inner liner spaced radially inward of said outer liner to define said combustion chamber therebetween.

16. A gas turbine engine in accordance with Claim 15 wherein at least one of said inner liner and said outer liner comprises a leading edge comprising a radius, said leading edge downstream from said gap such said leading edge forms a forward facing step for flow discharged from said gap.

17. A gas turbine engine in accordance with Claim 14 wherein said gap discharges therefrom for film cooling at least a portion of said liner assembly, said gap height selected to facilitate discharging cooling air from said gap at a velocity that is higher than a turbulent flame speed generated within said combustion chamber.

18. A gas turbine engine in accordance with Claim 14 wherein said combustor further comprises a divergent baffle extending downstream from said domeplate into said combustion chamber, said baffle comprising a flared downstream end and an upstream end coupled to said domeplate, said baffle downstream end facilitates directing fuel injected to said combustion chamber away from said domeplate gap.

19. A gas turbine engine in accordance with Claim 14 wherein said combustor further comprises a baffle coupled to said domeplate such that a baffle gap

is defined between said film cooling lip and said baffle, said baffle gap for channeling cooling air therethrough into said combustion chamber.

20. A gas turbine engine in accordance with Claim 14 wherein said combustor dome assembly further comprises at least one seal extending between said liner assembly and at least one of said inner and outer supports, said at least one filler projection facilitates sheilding said at least one seal from flame radiation generated within said combustion chamber.